Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Please amend the claims as follows:

Claims 1-35 (Canceled)

- 36. (Currently Amended) An apparatus for delaying an audio signal comprising:
- a first FIFO register receptive to a digital audio signal, the digital audio signal having an associated clock signal;
- an audio format detection <u>circuit</u> coupled to the first FIFO register and operative to detect a format of the digital audio signal <u>by analyzing the associated clock signal</u>;
 - a memory controller coupled to the FIFO register;
 - a memory chip coupled to the memory controller;
- a write address generator coupled to the audio format detection <u>circuit</u> and memory controller;
 - a read address generator coupled to the memory controller; and
- a second FIFO register coupled to the memory controller and operative to provide a time delay in the digital audio signal the duration of which is related to the detected format of the digital audio signal.
- 37. (Previously Presented) The apparatus as claimed in claim 36, wherein the digital audio signal further comprises a serial audio clock signal and a plurality of accompanying signals.
- 38. (Previously Presented) The apparatus as claimed in claim 37, wherein the accompanying signals further comprises a data signal and a frame synchronization signal.

- 39. (Currently Amended) The apparatus as claimed in claim 37, wherein the audio format detection <u>circuit</u> is operable to detect a number of edge transitions in the serial audio clock signal and provide a corresponding detected count.
- 40. (Currently Amended) The apparatus claimed in claim 37, wherein the audio format detection <u>circuit</u> further comprises a plurality of model data, wherein each model data represents one of a plurality of audio signal formats and a corresponding one of a plurality of time delay data, wherein the detected count is compared to the model data, the audio format detection <u>circuit</u> operable to provide the delay data representing the model data that is equal to the detected count.
- 41. (Previously Presented) The apparatus as claimed in claim 40, wherein the processed clock signal is synchronized to a reference clock.
- 42. (Currently Amended) The apparatus as claimed in claim 37, wherein the audio format detection <u>circuit</u> is operable to provide a processed clock signal by dividing the serial clock signal by a constant.
- 43. (Previously Presented) The apparatus according to claim 42, wherein the processing is operable to compare a new time delay data to an old time delay data, the processing device operable to reconfigure a buffer if the new time delay data is not equal to the old time delay data.
- 44. (Previously Presented) The apparatus as claimed in claim 40, wherein the detected count is compared to the model data by a plurality of comparators.
- 45. (Previously Presented) The apparatus as claimed in claim 40, wherein the provided time delay data is a first offset value, the processing device operable to resize a write address pointer with the offset value.
- 46. (Previously Presented) The apparatus as claimed in claim 40, wherein the provided time delay data is a second offset value, the processing device operable to resize a read address pointer with the offset value.

U.S. Application No. 09/478,122
Final Office Action mailed 2/23/06
Response to Final Office Action dated 7/24/06

- 47. (Previously Presented) The apparatus as claimed in claim 40, wherein the processing device further comprises a memory unit to provide the time delay corresponding to the time delay data.
- 48. (Previously Presented) The apparatus as claimed in claim 45, wherein the processing device further comprises a first parameter and a second parameter, the first parameter configured accordingly to the provided time delay data.
- 49. (Previously Presented) The apparatus as claimed in claim 48, wherein the first parameter is a write address parameter, the second parameter is a read address parameter, and the memory unit is a buffer.
- 50. (New) The apparatus as claimed in claim 37, wherein the audio format detection circuit comprises a synchronization circuit operative to synchronize the serial audio clock and a reference clock and, an edge detection circuit operative to detect edge transitions in the synchronized serial and reference clock.
- 51. (New) The apparatus as claimed in claim 50, wherein the audio format detection circuit comprises a memory lookup operative to obtain a memory address according to the detected edge transitions and correlating to the audio format of the digital audio signal, the memory address used to configure the write address generator.
- 52. (New) The apparatus as claimed in claim 37, wherein the format of the digital audio signal is one of eight possible formats.
- 53. (New) A method comprising:

receiving a digital audio signal;

analyzing a clock signal associated with the digital audio signal to determine a audio format of the digital audio signal;

providing an audio signal delay according to the audio format of the digital audio signal; and

outputting the digital audio signal.

54. (New) A method as recited in claim 53, further comprising:

U.S. Application No. 09/478,122 Final Office Action mailed 2/23/06 Response to Final Office Action dated 7/24/06

detecting a resulting value from a clock signal synchronized with the digital audio signal and a reference clock;

latching the resulting value;

looking up a memory write address using the resulting value;

comparing the memory write address to a previous memory write address; and if the memory write address is unequal to the previous memory write address, then retrieving a new audio signal delay.

- 55. (New) A method as recited in claim 53, further comprising counting transitions of a reference clock to create the resulting value.
- 56. (New) A method as recited in claim 53, further comprising counting transitions of a reference clock during a period of a modified clock signal derived from the clock signal.
- 57. (New) An apparatus comprising:

means for receiving a digital audio signal;

means for analyzing a clock signal associated with the digital audio signal to determine a audio format of the digital audio signal;

means for implementing audio signal delay by the audio format of the digital audio signal; and

means for outputting the digital audio signal.